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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,599	02/04/2004	Seo-Won Kwon	5000-1-516	3442
33942	7590	05/23/2007		
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			EXAMINER PASCAL, LESLIE C	
			ART UNIT 2613	PAPER NUMBER
			MAIL DATE 05/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/771,599

Applicant(s)

KWON ET AL.

Examiner

Leslie Pascal

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' PRIOR ART figure 2 in view of Ota (5282257).

The applicants' prior art Figure 2 teaches a WPAN which has an optical fiber (1,2), a plurality of pico-nets (30, 40, 50) which each have a PNC (PNC's), which allocate and manage timeslots, two ways signal converters (31, 41, 51) and couplers (22, 24, 26).

Although he does not teach that the system has bidirectional couplers, Ota (5282257) teaches that it is well known to use 3 bidirectional couplers in order to provide signals from any one of the couplers to be output to each of the other couplers. It would have been obvious to use the coupler of Ota in the system of Figure 2 in order to provide direct communication between the Pico nets without having to go through the central terminal. This would save time and reduce the noise acquired by the signal because it would no longer have to travel as far. In regard to the last 2 lines of claim 1 and claim 7, see paragraph 20 of the applicants' specification which teaches that one of the PNCs can control the allocation of time slots in other Pico-nets. Therefore, it would have been obvious to have one PNC in charge of time allocation in Pico nets that communicate with each other in order to avoid collisions.

3. Claims 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' PRIOR ART figure 2 in view of Ota (5282257) as applied to claims 1-11 above, and further in view of Lim et al (20050026569).

Although the above references do not teach specifics about how to provide the function without a MAC bridge, Lim et al teach systems similar to the applicants' prior art figures and applicants' figure 6. He teaches that there is not a "MAC bridge" to provide the parent/ child function. See specifically the independent claims of LIM.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Applicant's arguments filed 4-16-07 have been fully considered but they are not persuasive. The applicant argues that figure 1 does not teach that time allocation is supplied by a PNC to other piconets. This is unclear. Figure 1 shows a **SINGLE**

piconet. The specification teaches that it can be either a parent or child piconet, in which the child piconet has allocation by a parent. See the above Lim et al reference that teaches similar systems and teaches that the parent PNC allocates times to the child.

See MPEP 2111.04

Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) “adapted to” or “adapted for” clauses;
- (B) “wherein” clauses; and
- (C) “whereby” clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a “whereby” clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention.” *Id.* However, the court noted (quoting *Minton v. Nat ’l Ass’n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a “whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.” *Id.*<

The “wherein” clauses in this application “do not limit a claim to a particular structure”. The applicant appears to argue that the prior art cannot provide such a function, but it is unclear why the applicants’ structure, as claimed, provides such a function. Applicant’s figure 1 can be either a parent or child piconet, which appears to read on the claims since a child piconet gets allocation of time slots from the parent piconet. It does not appear that the applicant has claimed specific means, which

provides the functions claimed. In addition, the claims added do not claim specific means that provide the function.

The applicant argues that his invention does not require a MAC bridge or a central entity. The applicant only claims (in the original claims) that the allocation is provided by one piconet for other piconets, which appears to read on parent/child piconets.

The applicant argues that Ota is not used in a piconet system. Ota teaches a coupler, it would have been obvious to replace a coupler that would operate in any type of system with another coupler in order to provide bidirectional communications.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al teach parent and child piconets with time allocation..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leslie Pascal
Primary Examiner
Art Unit 2613